

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of the claims:

1. (currently amended) An access point, comprising:
 - a web server interface that couples one or more guests to the Internet;
 - a usage collector application that monitors and collects usage of all of said guests;
 - and
 - web cache software that proactively caches, in a local memory of the access point, non-requested web pages that relate to a topic of a web page requested by a guest and indicates to the guest that the non-requested web pages are available for viewing~~are of interest to one or more guests in a local memory of the access point~~, wherein the access point is a single device that links the one or more guests on personal computers to a broadband or telephone connector from which Internet access is obtained for the personal computers.
2. (currently amended) The access point of claim 1, wherein the web cache software predicts the non-requested web pages that are of interest to the~~a~~ guest based on that guest's usage pattern, and caches the non-requested web~~these~~ pages in the local memory.
3. (currently amended) The access point of claim 1-2, wherein the web cache software initiates a signal to the guest indicating that the non-requested web~~cached~~ pages are available for viewing.
4. (previously presented) The access point of claim 1, further comprising a diagnostic application that identifies a cause for an increase in access time to retrieve a web site, and a management application that downloads a patch to the access point to correct the increase in access time to retrieve the web site.

5. (original) The access point of claim 1, wherein each of said guests includes an identification mechanism which is used by said usage collector to compile usage information specific to each guest.
6. (previously presented) The access point of claim 1, further comprising a local monitor that collects usage information from the usage collector application and generates a summary page of system status information and errors detected since the access point was last accessed by a remote server.
7. (previously presented) The access point of claim 6, wherein the local monitor couples to a remote monitor to provide further analysis of the usage information to the remote monitor.
8. (original) The access point of claim 7, further comprising a diagnostic application that launches when the usage collector detects an abnormality.
9. (currently amended) The access point of claim 7, wherein the web server interface includes authentication software that determines if the guest is authenticated to access and use the access point.~~8, further comprising a management application that configures the local monitor to provide summary information to the remote monitor.~~
10. (original) The access point of claim 8 further comprising a management application that requests programs from the remote monitor based on the result of diagnostic application.
11. (currently amended) The access point of claim 7, wherein the web server interface executes a web server software application that performs tasks of logging in or logging off the guests and collecting payment.~~10, wherein the web cache application, diagnostic application, and management application are dynamically modified based on guest usage.~~
12. (currently amended) A method of providing guests with Internet service, comprising:

detecting at an access point a request for Internet access from a guest on a personal computing device;

monitoring at the access point usage patterns of the guest;

predicting non-requested web pages that relate to a topic of a web page requested by the guest and that are information that is of interest for the guest based on the guest's usage patterns; and

locally caching in the access point the non-requested web pages that are information that is of interest to the guest, prior to the time that the guest requests the non-requested web pages information, the access point being a single device that links the guest on the personal computing device to a broadband or telephone connector from which Internet access is obtained for the personal computing device.

13. (original) The method of claim 12, further comprising transmitting information relating to the guest's usage patterns to a remote server, and analyzing the guest's usage patterns at the remote server using artificial intelligence software, and correlating the guest's usage patterns with previously detected usage patterns to predict future usage patterns of the guest.

14. (currently amended) The method of claim 12, wherein the act of predicting includes proactively caching the non-requested web pages ~~web sites~~ that the access point predicts the guest will want based on a topic for which the guest previously selected web sites.

15. (original) The method of claim 12, wherein the act of predicting includes considering usage patterns of other guests.

16. (previously presented) The method of claim 12, further comprising identifying an error or sub-optimal condition in the access point and automatically downloading a patch to fix the error or the sub-optimal condition.

17: (currently amended) A system for remotely managing a plurality of Internet access points, comprising:

a plurality of access points that provide Internet access for one or more guests, each of said access points being a single device and including a web server interface and a usage collector application, with the usage collector application detecting and collecting information relating to guest usage;

a remote management server that couples to said plurality of access points via the Internet, said remote server including a remote monitor and a database;

wherein the information relating to guest usage is transferred from the plurality of access points to the remote management server, and the remote management server analyzes the guest usage using software stored in said database to detect usage patterns, and the remote monitor downloads information to one or more access points to enhance the operation of the access point based on the detected usage pattern, wherein the access points cache in local memory non-requested web pages that relate to topics of previously requested web pages by the guests and link personal computers of the guests to a broadband or telephone connector from which the Internet access is obtained for the personal computers, the non-requested pages being a prediction based on usage patterns of the guests.

18. (original) The system of claim 17, wherein the usage collector application also detects information relating to system usage, and said information relating to system usage also is transferred to the remote management server for analysis.

19. (original) The system of claim 17, wherein at least one of the access points is a wireless access point that couples to the one or more guests via a wireless transmission medium.

20. (original) The system of claim 17, wherein the software stored in the database and used to detect usage patterns comprises artificial intelligence software.

21. (previously presented) The system of claim 20, wherein the artificial intelligence software predicts web pages that are of interest to guests based on usage patterns, and the access points include a web cache application for locally caching web pages predicted to be of interest to guests.

22. (original) The system of claim 20, wherein the artificial intelligence software detects improper activity based on usage patterns, and provides instructions to an access point to take corrective action to minimize the effect of the improper activity.

23. (original) The system of claim 17, wherein the access points include a diagnostic application that analyzes the access points to detect possible errors.

24. (previously presented) The system of claim 23, wherein the diagnostic software signals the remote monitor to download a program to an access point to assist in resolving a detected error condition.

25. (currently amended) An access point that permits multiple guests to obtain Internet access, comprising:

means in said access point for interfacing said access point with the multiple guests;

means in said access point for coupling the access point to the Internet;

means in said access point for monitoring and collecting requests made by a guest to collect information on a guest's usage;

means for selecting content that is of interest to the guest based on the guest's usage; and

means in said access point for locally storing content that is of interest to the user, wherein the access point is a single device that links the multiple guests on personal computing devices to a broadband or telephone connector from which the Internet access is obtained for the personal computing devices, and the access point predicts and caches

in local memory a non-requested web page that relates to a topic previously requested by a guest.

26. (currently amended) The access point of claim 25, wherein the access point indicates to the guest that the non-requested web page is available for viewing~~means for monitoring requests also monitors operational parameters related to said access point.~~

27. (previously presented) The access point of claim 25, further comprising means for diagnosing malfunctions of said access point.

28. (previously presented) The access point of claim 26, further comprising means for managing said access point.

29. (previously presented) The access point of claim 28, wherein the selecting means, diagnosing means, and managing means are dynamically modified based on the guest's usage detected by said monitoring means.